

Work Order ID 133752

Tuesday, June 16, 2015 2:55:20 PM

133752

Page 1

Item ID: D4306-045 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Rib Assembly
 Start Date: 6/16/2015 Start Qty: 3.00 ~~*3*~~ 2x *SL* Cust Item ID:
 Required Date: 6/16/2015 Req'd Qty: 3.00 ***3*** Customer:
 Reference:

Approvals: Process Plan: ML3 Date: JUN 16 2015 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4306	C

100 Weld per dwg A/R S.S. rod Batch: 4131414 0.00

100

Large Fab

Large Fab

Memo

- 1- Cut tube 50"
- 2- Bend tube with manuel pipe bender as per DT9567
- *** Make line at 9.00" and use jig for other lines, and ensure seam in place on side of tube when bending***
- 3- Trim access tube material to finish size as per dwg D4306-5
- 4- Drill and chamfer holes as per dwg D4306-5 using DT9710
- 5- weld bushing as per dwg D4306
- 6- grind welds flush

3x 2x *DL 15/6/22*
DAS 43 9-89
AUG 26 2015

110 QC6- Inspect dimensions to drawing 0.00

110

QC

Quality Control

Memo

3x **DAS 24 9-89**
AUG 26 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																											
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Page 2

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 Item Name: Rib Assembly
 Start Date: 6/16/2015 Start Qty: 3.00 ***3*** Cust Item ID:
 Required Date: 6/16/2015 Req'd Qty: 3.00 ***3*** Customer:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC10- Inspect visual per QSI004- ground welds	0.00							
120						2x	DAS 24 9-89	AUG 26 2015	
QC	Memo	0.00							
Quality Control									
130	Identify as per dwg & Stock Location: <i>WVA 04</i>	0.00							
130						2x	DAS 43 9-89	AUG 26 2015	
Packaging	Memo	0.00							
Packaging	LOCATION: WA004								
140	QC21- Final Inspection - Work Order Release	0.00							
140							15/9/3		
QC	Memo	0.00							
Quality Control									

SH 20150903

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

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Page 1

Work Order ID: 133752

133752

Parent Item: D4306-045

D4306-045

Parent Item Name: Rib Assembly

Start Date: 6/16/2015

Required Date: 6/16/2015

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP Rev:A 11.01.20 new issue DD verf:EC
11.03.03 AS PER DWG REV.C DD verf:EC

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3759-1		Manufactured	No			100	Each	177.0000	4	12			
D3759-1									**		DAS 43 9-89	AUG 26 2015	
Bushing													

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA004	177	
116816	59	
117449	2	
130893	18	
132468	90	
132855	8	

B133406 → 8
B135756 → 4

M304TS0.750W.049

Purchased

No

100

f

668.5750

4.166

14

M304TS0 750W 049

3X DL 15/6/22

304 SQ Tube .75x.75x.049W

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA004	668.575	
M130871	84.4	
M131128	13.175	
M131868	571	

#18.175

DQA: _____ Date: _____



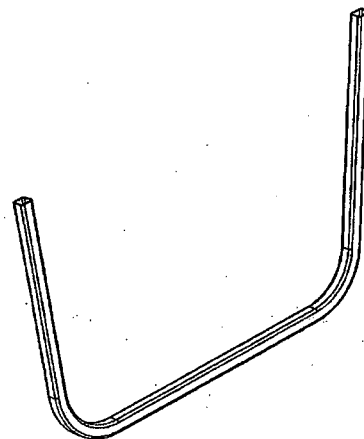
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

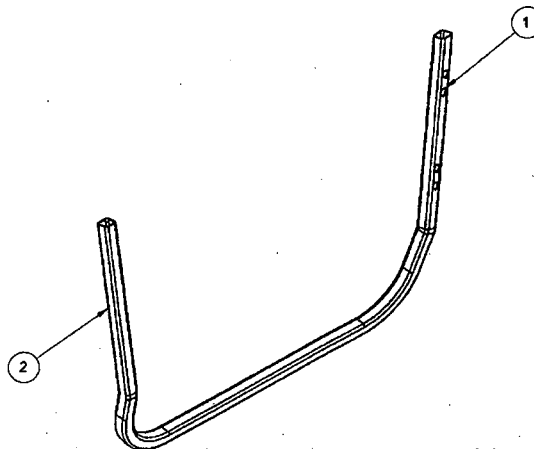
Work Order update only ☐

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OTHER : ☐					

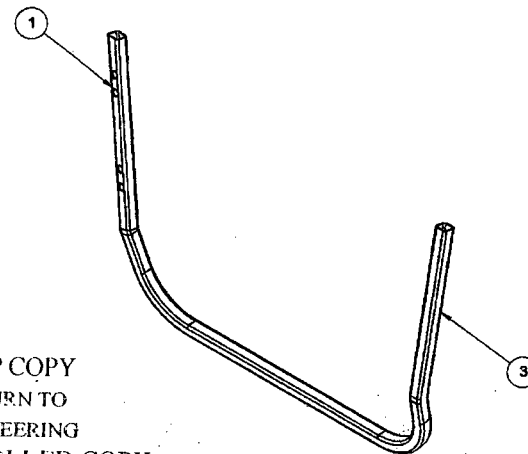
ITEM	QTY -043	QTY -044	QTY -045	P/N	DESCRIPTION
	X			D4306-043	RIB ASSY, LH
		X		D4306-044	RIB ASSY, RH
			X	D4306-045	RIB ASSY
1	4	4	4	D3759-1	BUSHING
2	1			D4306-3	RIB
3		1		D4306-4	RIB
4			1	D4306-5	RIB



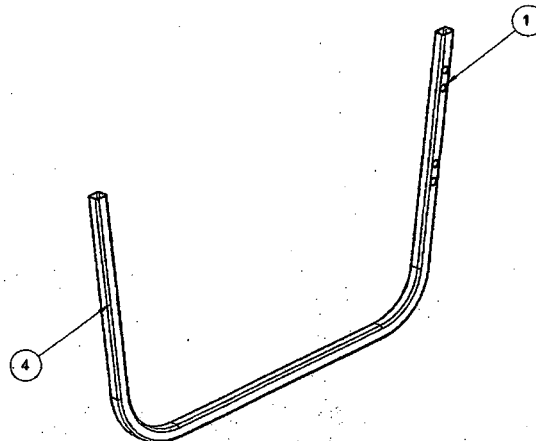
D4306-1 RIB



D4306-043 RIB ASSY, LH



D4306-044 RIB ASSY, RH



D4306-045 RIB ASSY

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO **133352 MLS**

150616

RELEASED
2011-03-10

REV.	DESCRIPTION	BY	DATE
C	REFERENCE LENGTH CHANGED TO 52.0" FOR D4306-3, D4306-4 RIBS (A7-4/6); INCREASED LENGTH OF D4306-3, D4306-4 RIBS BY 0.65" (C7-4, C8-4, C1-6, C2-6); CHANGED CUT ANGLE FROM 19° TO 22° (B9-4, B1-6); ADDED 4.50" REF DIM ON D4306-043/044 (B6-3, B3-5)	SC	11.02.09
B	D4306-043, D4306-044, D4306-045 ADDED	SC	10.12.17
A	NEW ISSUE	CP	10.11.29
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D4306 TITLE RIB SCALE NTS SHEET 1 OF 8 REV. C COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRELIMINARY AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMING OR COMMUNICATION TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DRAWN	SC		
CHECKED	SC		
MFG. APPR.	SC		
APPROVED	SC		
DE APPR.	SC		
DATE	11.02.09		

8 7 6 5 4 3 2 1

D

D

C

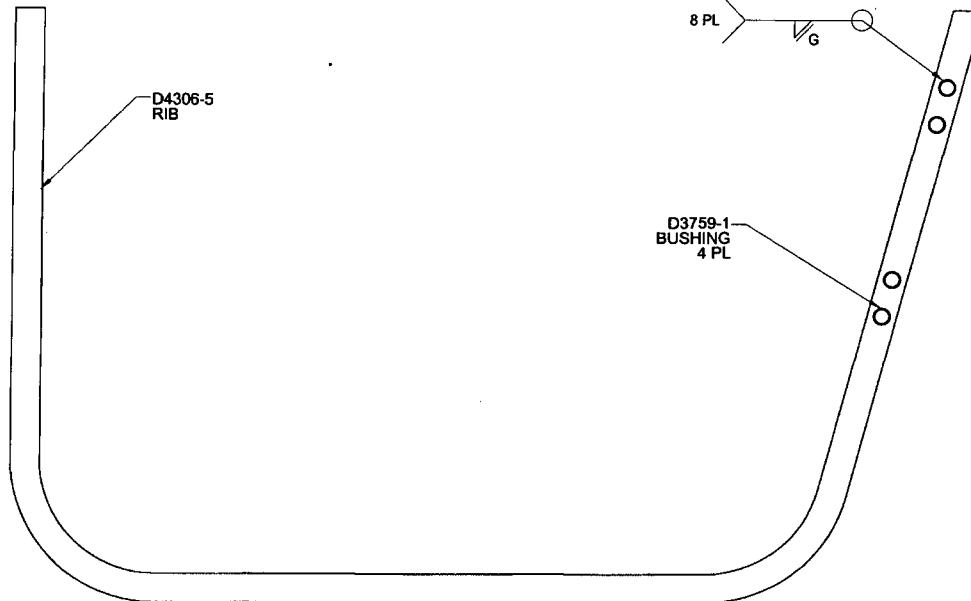
C

B

B

A

A



D4306-045 RIB ASSY

RELEASED
2011-02-24
JMD

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.78 lbs
- 8) WELDING: PER DART QSI 004

DESIGN	CP	DART AEROSPACE LTD	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED	SC	DRAWING NO.	REV. C
MFG. APPR.	SC	D4306	SHEET 7 OF 8
APPROVED	SC	TITLE	SCALE
DE APPR.	SC	RIB	NTS
DATE	11.02.09	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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